

Point Module VII—Irrigation

Irrigation data were collected during the 1982, 1987, and 1992 National Resources Inventories. Concepts, definitions, and instructions are the same as those used in previous inventories.

Definition

Irrigated land is land that shows evidence of being irrigated during the year of the inventory or having been irrigated during two or more of the last four years. Water is supplied to crops by ditches, pipes, or other conduits. Waterspreading is not considered irrigation for this inventory. [NRI-92]

Importance

Collection of data on irrigation provides the opportunity to monitor changes in status of irrigated land. In areas where aquifer depletion is a concern, irrigation data give some indication of irrigation pressure on the aquifer. Information on irrigation practices is used to analyze erosion and other natural resource issues.

Guidelines and Clarification

Irrigation data for the 1997 NRI are gathered when land cover/use is classified as cropland or pastureland. Interpretations should be made consistently for the inventory years 1982, 1987, 1992, and 1997.

A. Type of Irrigation

Determine if the land is being irrigated during the current (inventory) year or has been irrigated two of the last four years. If so, determine the type of irrigation used. Check prerecorded data for any year that land cover/use is classified as cropland or pastureland.

Categories and Codes

Code	Category
0	Not irrigated
1	Gravity irrigated
2	Pressure irrigated
3	Gravity and pressure irrigated

Documentation Required in PSU Folder

Maintain source photography and other records used to make determinations.

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7. Irrigation

Type?

Note

82	87	92	97
0	0	0	

Source of water?

82	87	92	97
0	0	0	

Delivery system?

82	87	92	97
		0	

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Names

Dates

Extras

Undo

Find

Assist

PDA Instructions

Select the appropriate response from the choice list.

Examples

Irrigation water is delivered to the field through an irrigation ditch. Water is siphoned from the ditch and allowed to gravity flow down the furrows. This is reported as **code 1, Gravity irrigated**.

Irrigation water is delivered to the field through an irrigation ditch. A side-roll sprinkler irrigation system picks up water from the ditch and irrigates the field. This is reported as **code 3, Gravity and pressure irrigated**.

Irrigation water is delivered to the field through a pressure pipeline. The field is irrigated with a center pivot irrigation system. This is reported as **code 2, Pressure irrigated**.

B. Source of Water

If the land is being irrigated during the current year or has been irrigated at least two of the last four years, identify the source of irrigation water. If tailwater recovery is used, then record initial source (of recovered water). Check prerecorded data.

Categories and Codes

Code	Category
1	Well
2	Pond, lake, or reservoir
3	Stream, ditch, or canal
4	Lagoon or other wastewater (does not include tailwater recovery)
5	Combination

Documentation Required in PSU Folder

No documentation required.

PDA Instructions

Select the appropriate response from the choice list.

Example

Examination of the photography reveals a well house with power lines going to it. The source of water would be coded as **1, Well**.

C. Delivery System to Field

If the land is being irrigated during the current year or has been irrigated two of the last four years, identify the method of delivery to the field, or if the source of water is in the field, identify the method of delivery within the field.

Categories and Codes

Code	Category
1	Canal or ditch (lined or unlined)
2	Pipeline

Documentation Required in PSU Folder

No documentation required.

PDA Instructions

Select the appropriate response from the choice list.

Upon completion, tap the completion check box to verify data entry. Resolve any reported edit checks.

Example

Examination of the photography reveals a canal along the side of the field. The delivery system is coded as **1, Canal or ditch**.

Point Module VII Glossary

(The following definitions were extracted from the 1997 National Resources Inventory glossary.)

Canal. An artificial waterway used for irrigation. [NRI-97]

Ditch. A long, narrow trench or furrow dug in the ground, as for irrigation. [NRI-97]

Gravity and pressure irrigated. Farm delivery and field distribution of irrigation water are a combination of gravity and pressure facilities. For example, a valve is used to reduce pressurized water delivered to a farm or field for subsequent distribution by a gravity surface irrigation system. [NRI-92]

Gravity irrigated. Water is delivered to the farm and/or field by canals or pipelines open to the atmosphere; and, water is distributed by the force of gravity down the field by: [NRI-92]

- A surface irrigation system (border, basin, furrow, corrugation, wild flooding), or
- Subsurface irrigation pipelines or ditches.

Lagoon—waste treatment. An impoundment made by excavation or earthfill for biological treatment of animal or other agricultural waste. [NHCP]

Lake. An inland body of water, fresh or salt, of considerable size occupying a basin or hollow on the earth's surface, and which may or may not have a current or single direction of flow. [ASCE, Nomenclature for Hydraulics]

Pipeline. A conduit of pipe used for the conveyance of water. [NRI-97]

Pressure irrigated. Water is delivered to the farm and/or field in pump or elevation induced pressure pipelines; and water is distributed across the field by: [NRI-92]

- Sprinkle irrigation (center pivot, linear move, traveling gun, side roll, hand move, big gun, or fixed set sprinklers), or
- Micro irrigation (drip emitters, continuous tube bubblers, microspray or microsprinklers).

Pond. A body of water of limited size either naturally or artificially confined and usually smaller than a lake. [NRI-92]

Reservoir. A pond, lake, basin, or other space, either natural in its origin or created in whole or in part by the building of engineering structures, that is used for storage, regulation, and control of water. [ASCE, Nomenclature for Hydraulics]

Stream. A flow of water in a channel or bed, as a brook, rivulet, or small river. [NRI-97]

Waterspreading. Diverting or collecting runoff from natural channels, gullies, or streams with a system of dams, dikes, ditches, or other means, and spreading it over a relatively flat area. [NHCP]

Well. A hole drilled or bored into the earth providing access to water. [NRI-97]